

Fig. 1

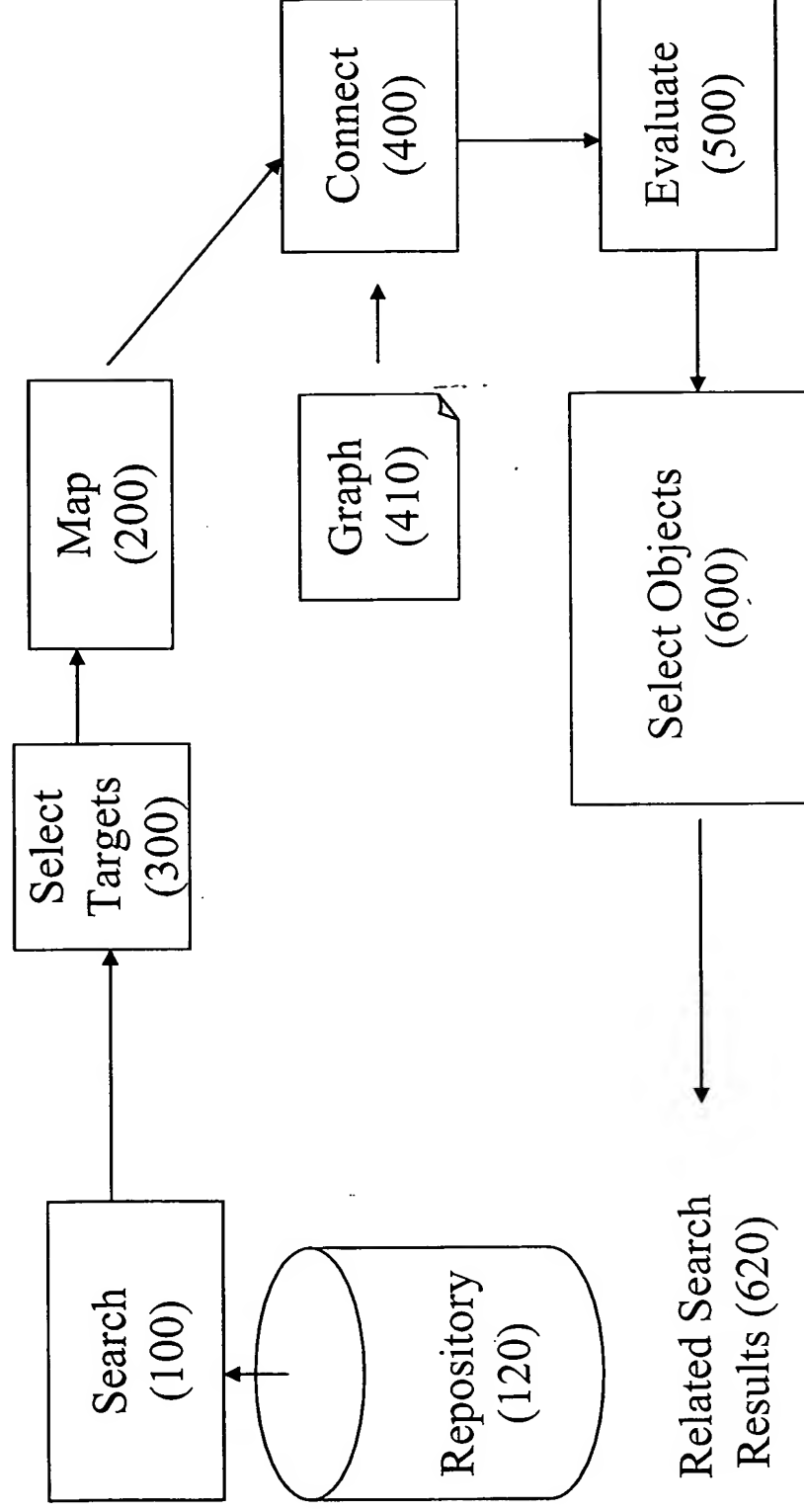


Fig. 2

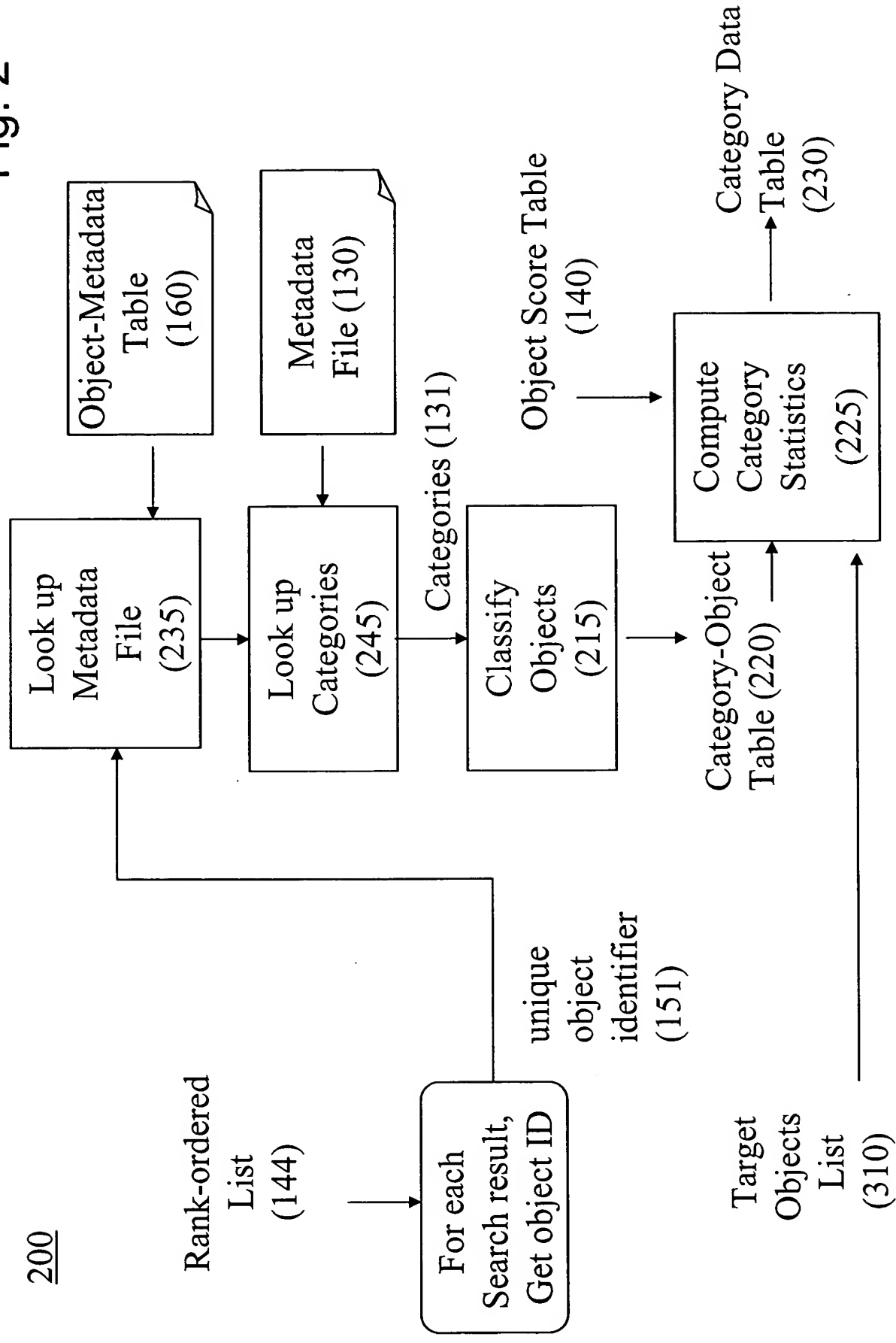


Fig. 3

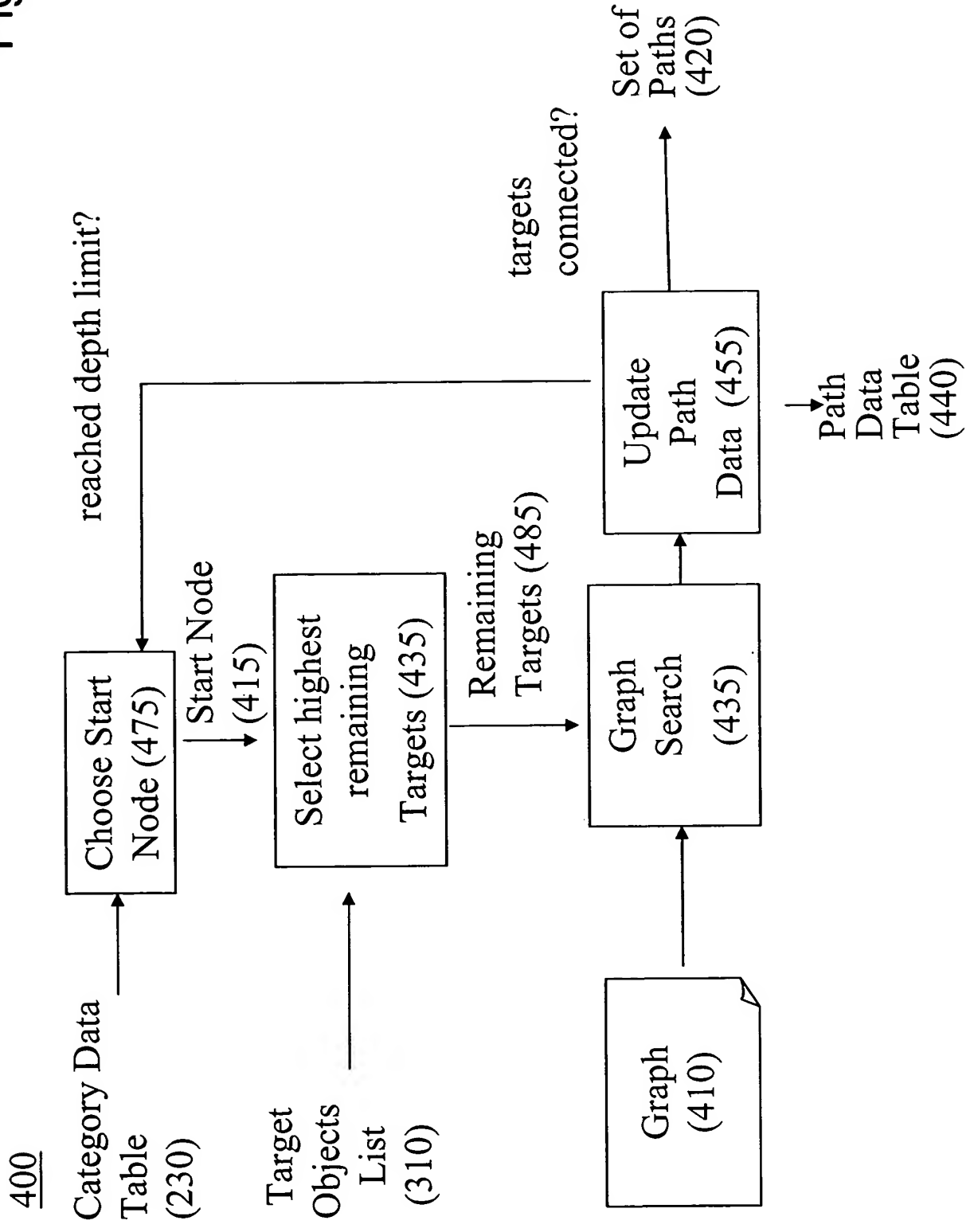
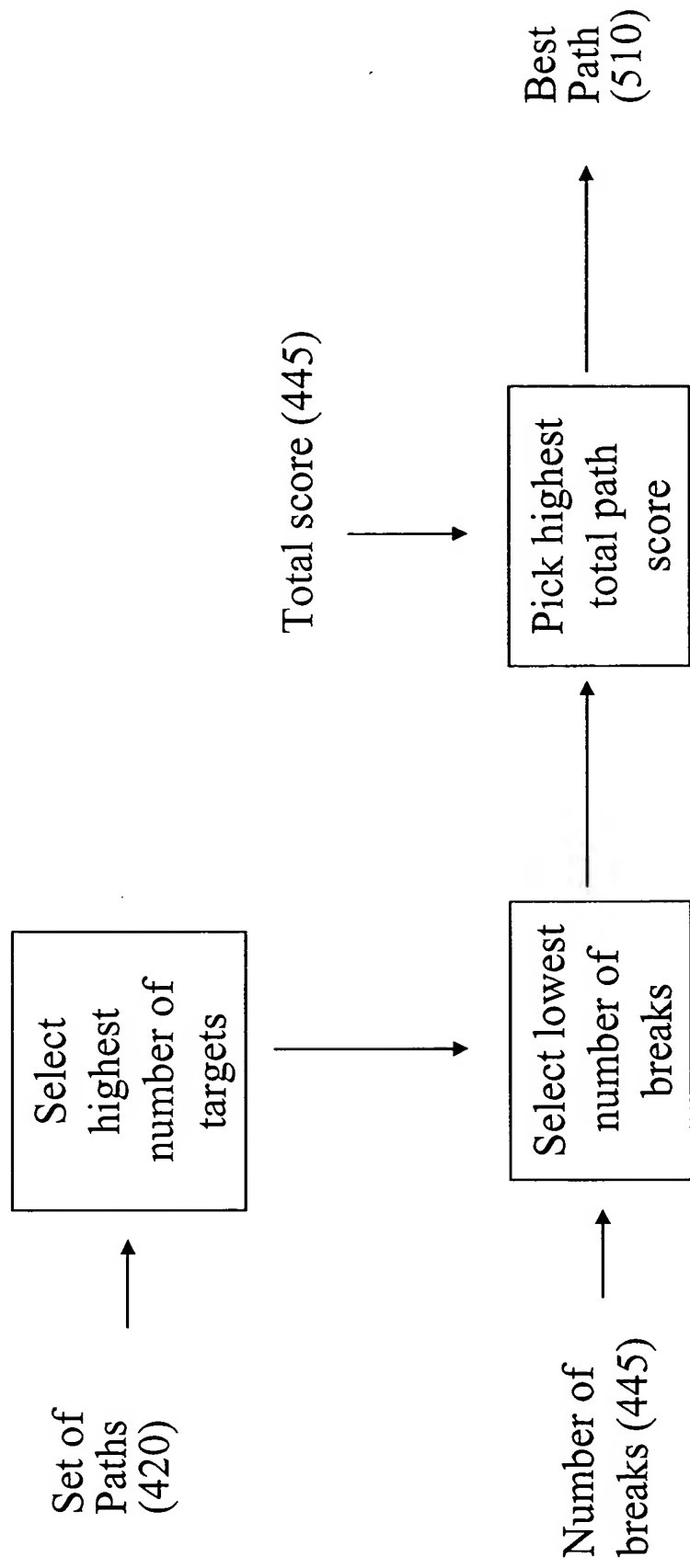


Fig. 4



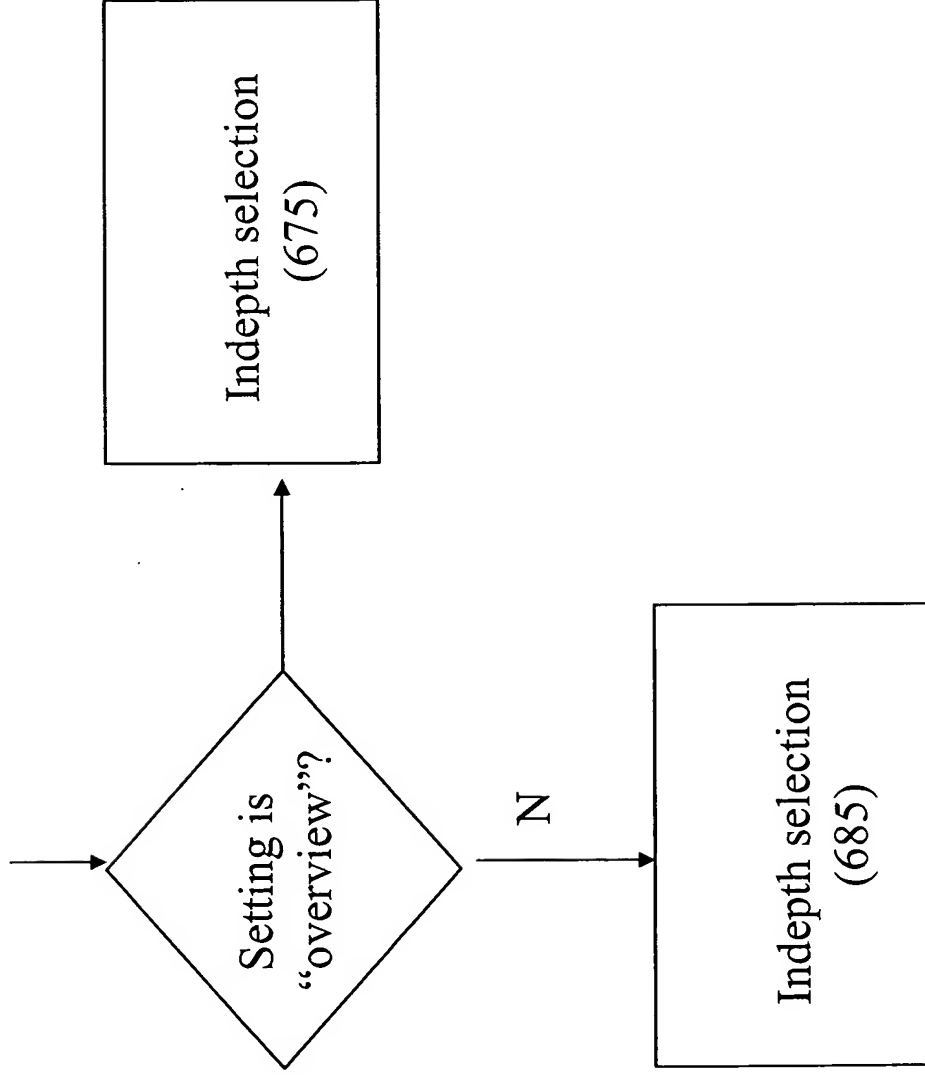


Fig. 5

Fig. 6

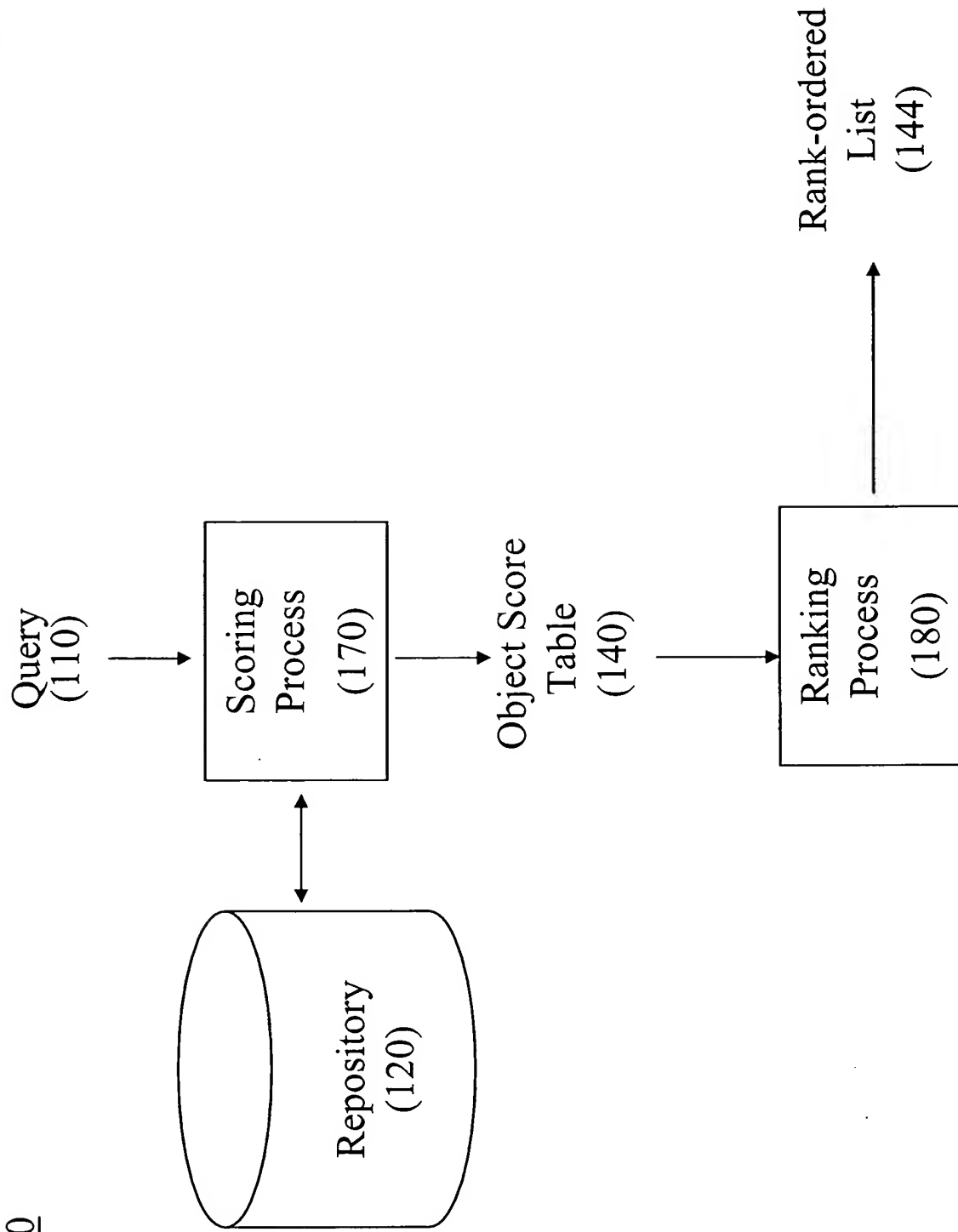


Fig. 7

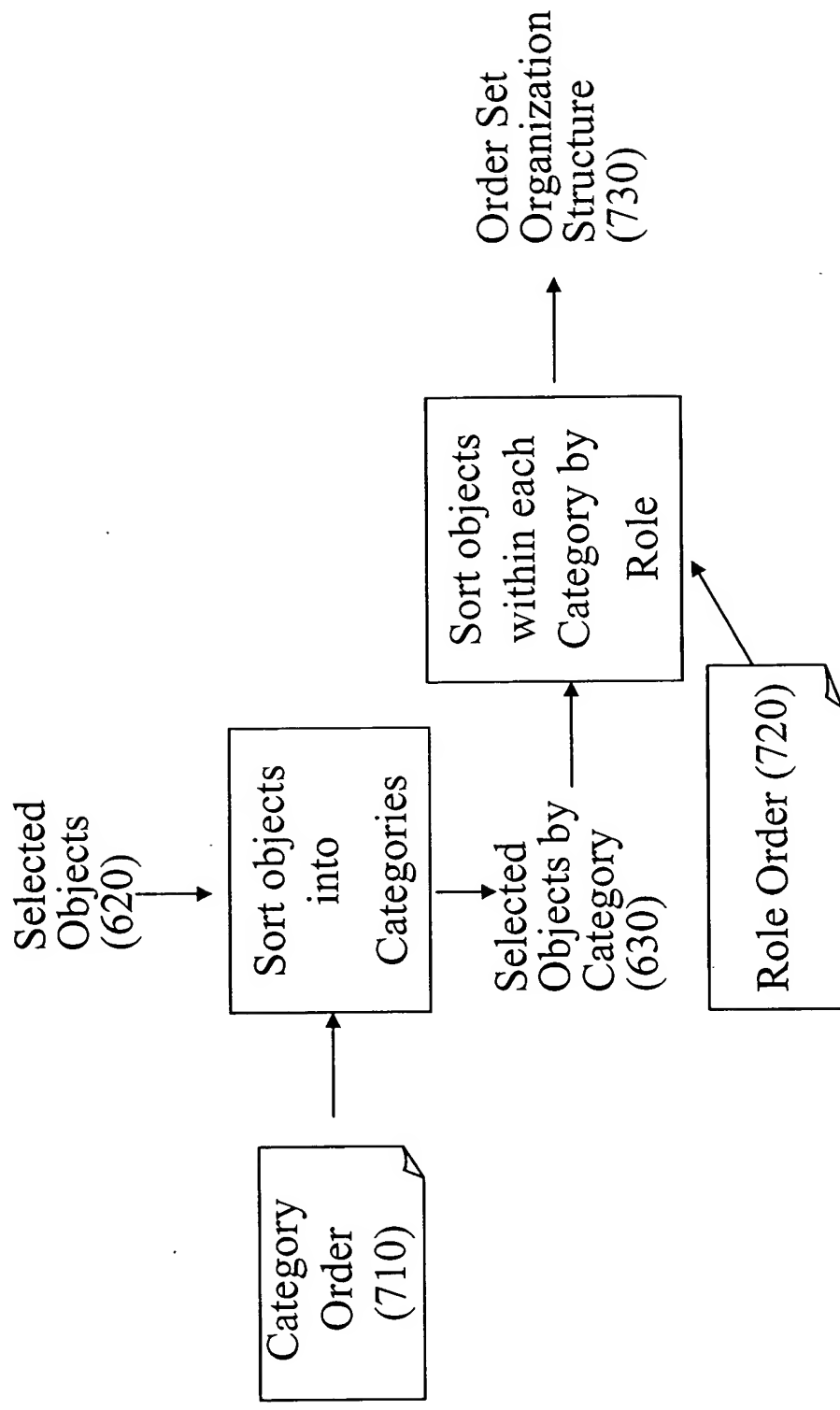


Fig. 8

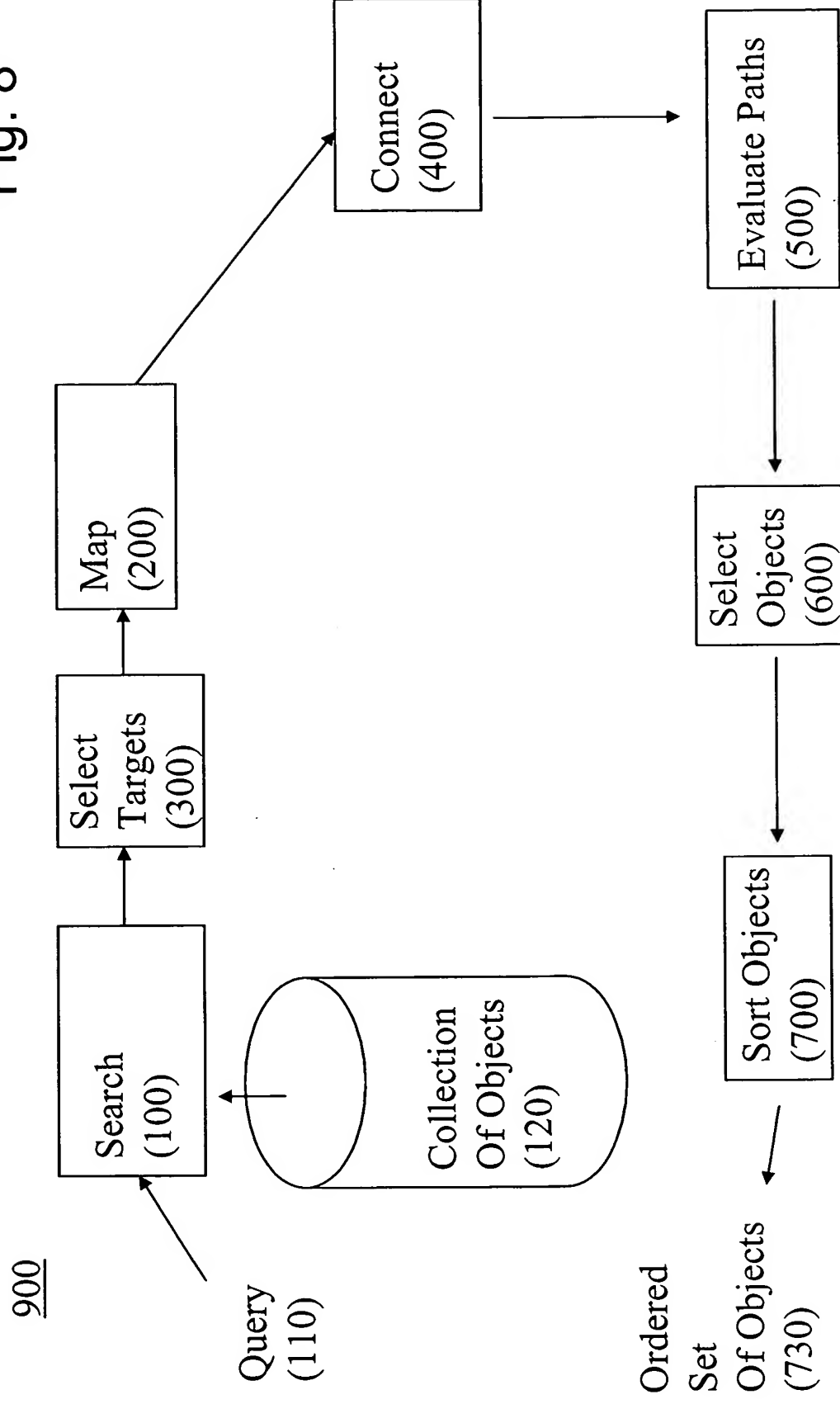


Fig. 9

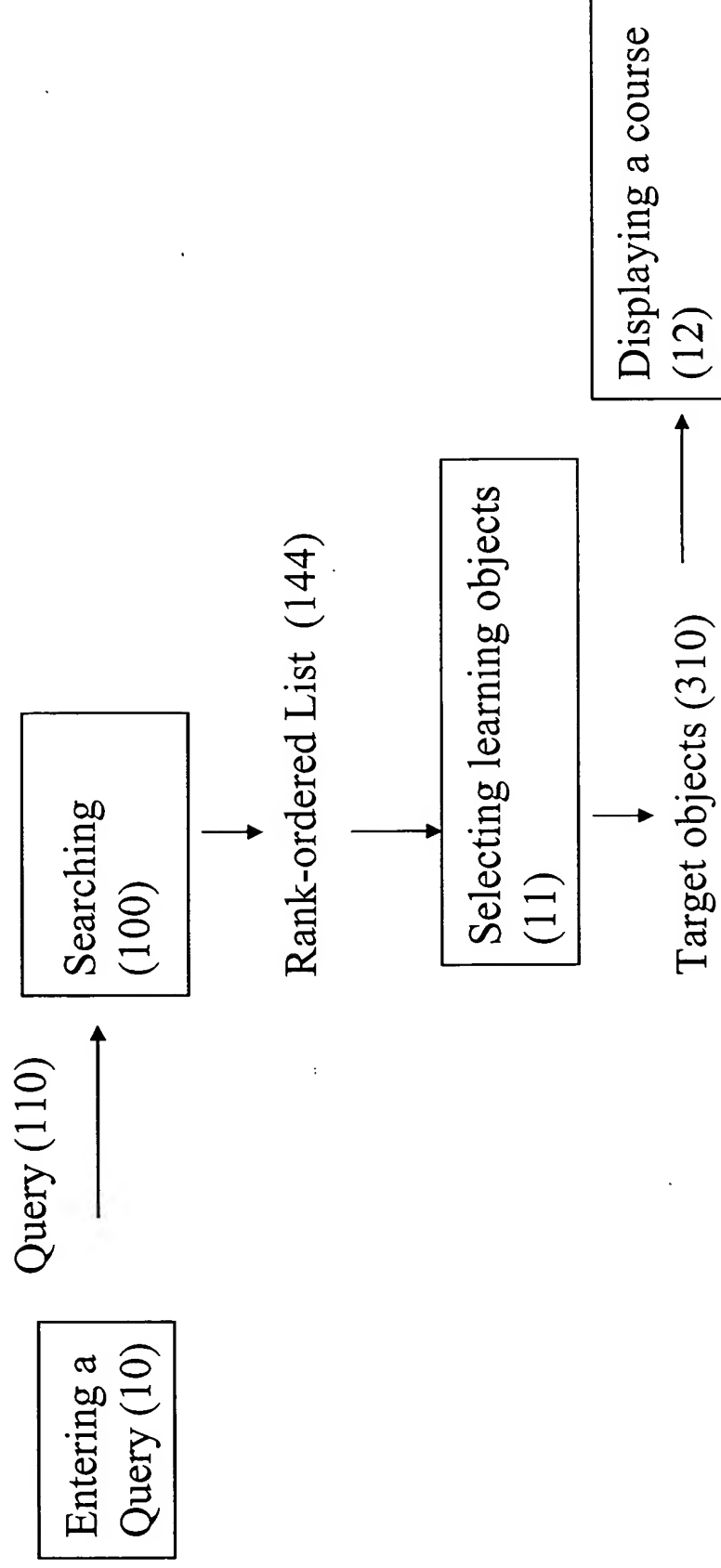


Fig. 10

Keywords:	<input type="text"/>	991
Duration (min):	<input type="text"/> 1-2 <input type="text"/> 2-5	992
	<input type="text"/> 5-10 <input type="text"/> 10-20	
Scope:	<input type="text"/> indepth <input type="text"/> overview	993
Media:	<input type="text"/> text <input type="text"/> image <input type="text"/> video <input type="text"/> audio	994
Manual assembly?	<input type="text"/> Yes <input type="text"/> No	995

118

Fig. 11

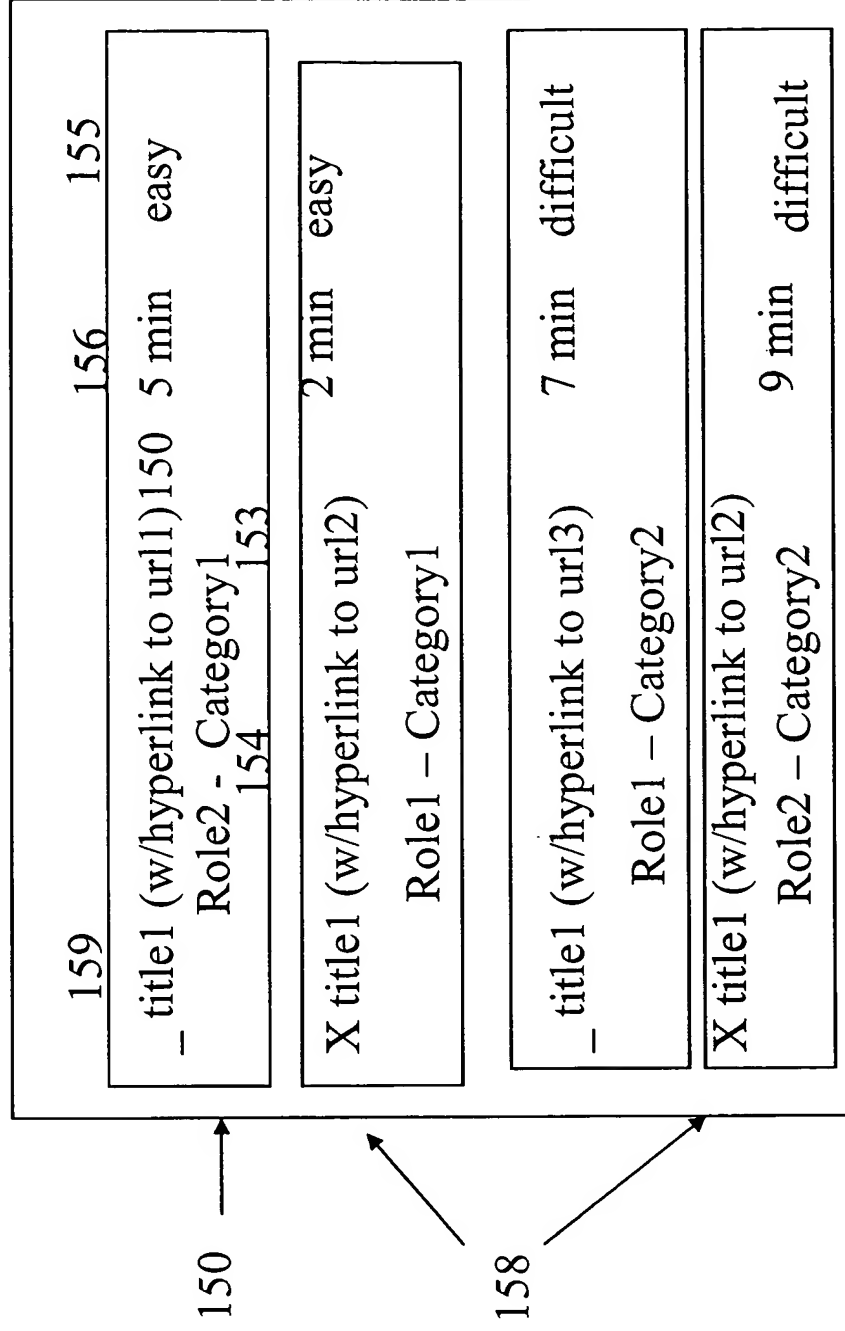
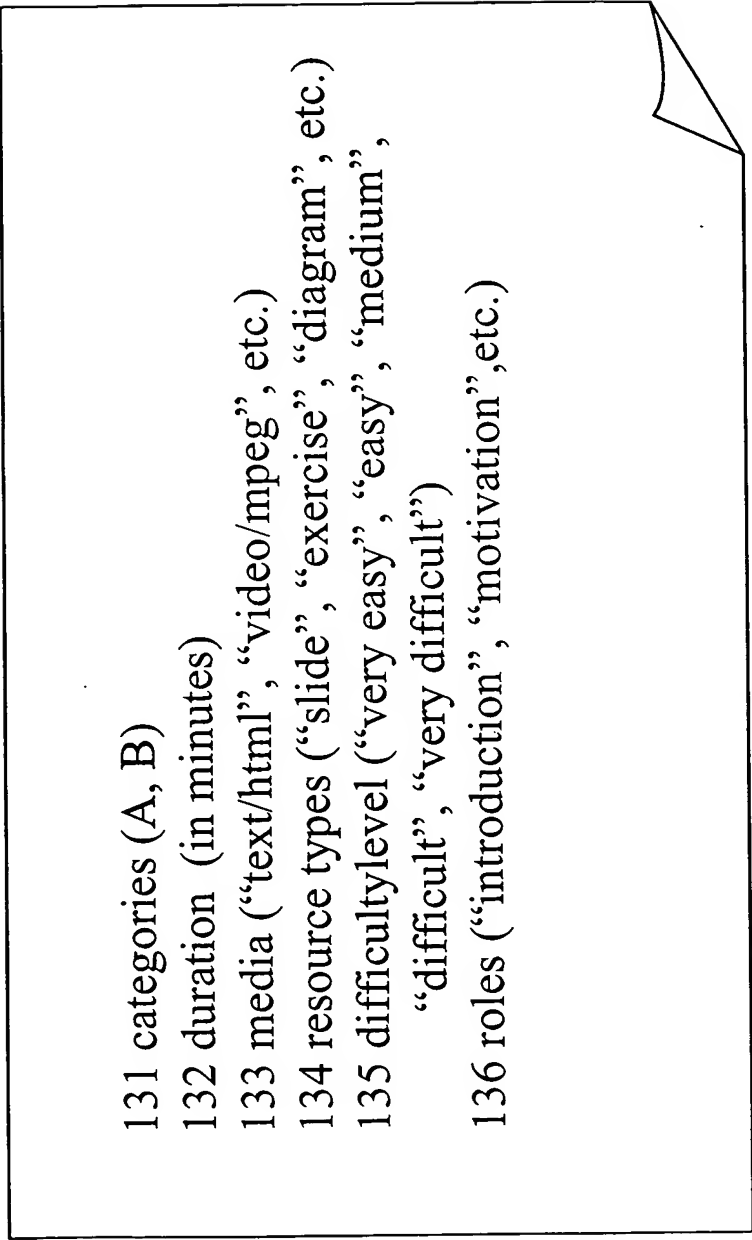


Fig. 12

738	737	738	736	732
title2 (w/hyperlink to url3)				
Role1 – Category1			9 min	difficult
title1 (w/hyperlink to url2)				
Role2 – Category1			2 min	easy
title3 (w/hyperlink to url3)				
Role2 – Category1			5 min	difficulty
Total: 16 min 735				



131 categories (A, B)  
132 duration (in minutes)  
133 media (“text/html”, “video/mpeg”, etc.)  
134 resource types (“slide”, “exercise”, “diagram”, etc.)  
135 difficulty level (“very easy”, “easy”, “medium”,  
“difficult”, “very difficult”)  
136 roles (“introduction”, “motivation”, etc.)

Fig. 14

Object Identifier (151)
url
url2
url3

object identifier (151)

Category (221)	Ur11	ur12	ur13
A	1	1	0
B	0	0	1
C	0	0	0
D	0	0	0

Fig. 16

230

Categories (131)	Number of objects (232)	Sum of scores (233)	Average score (234)	Number of target objects (235)
A				
B				
C				
D				

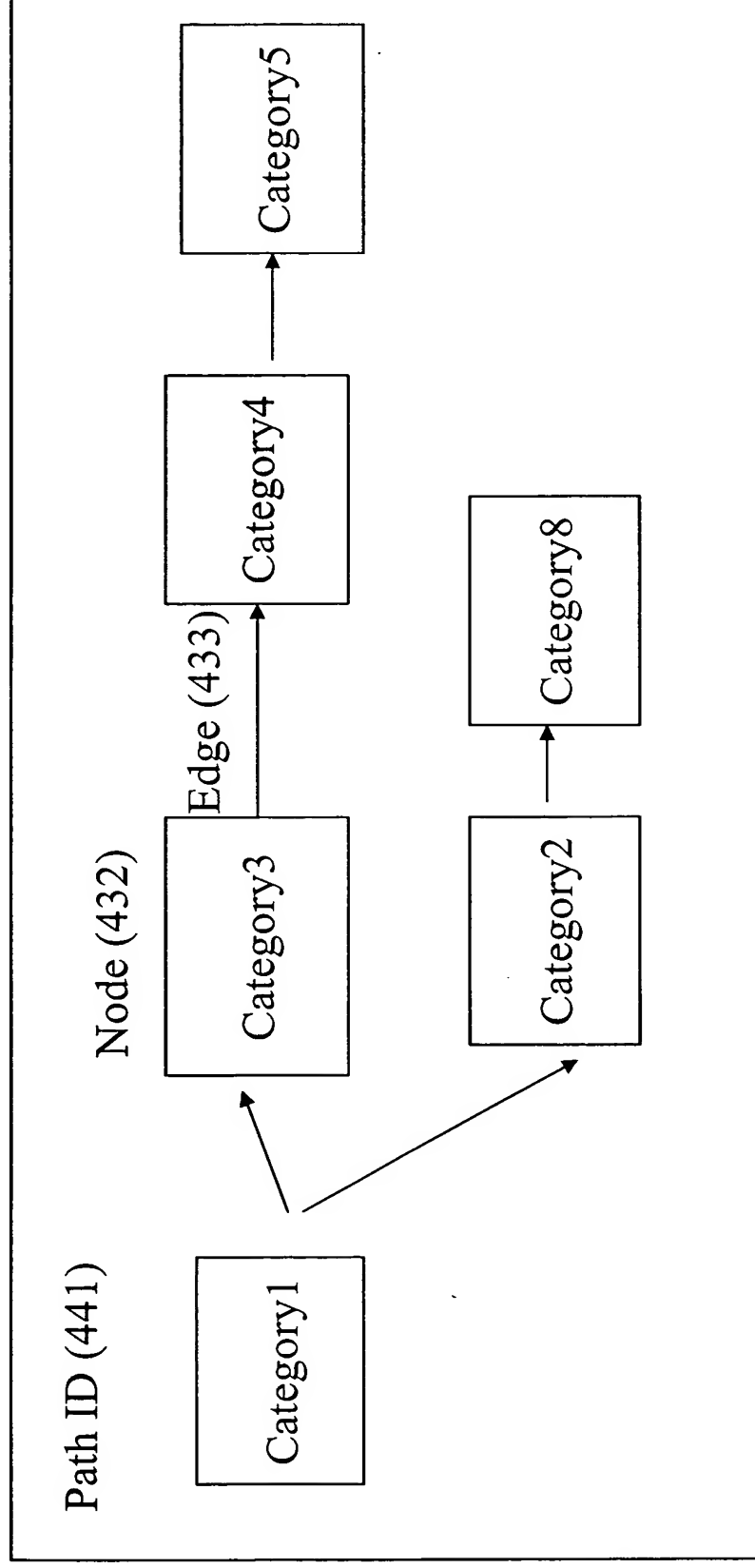
Fig. 17

410

Category Nodes (411)	A	B	C	D
A	0	1	1	0
B	0	0	0	1
C	0	0	0	1
D	0	0	1	0

Category relationship  
edges (412)

Fig. 18



Paths ID(441)	Path length (442)	Number of breaks (443)	Number of targets (444)	Total score (445)	Total duration (446)	Number of objects (447)

Organization Element (731)

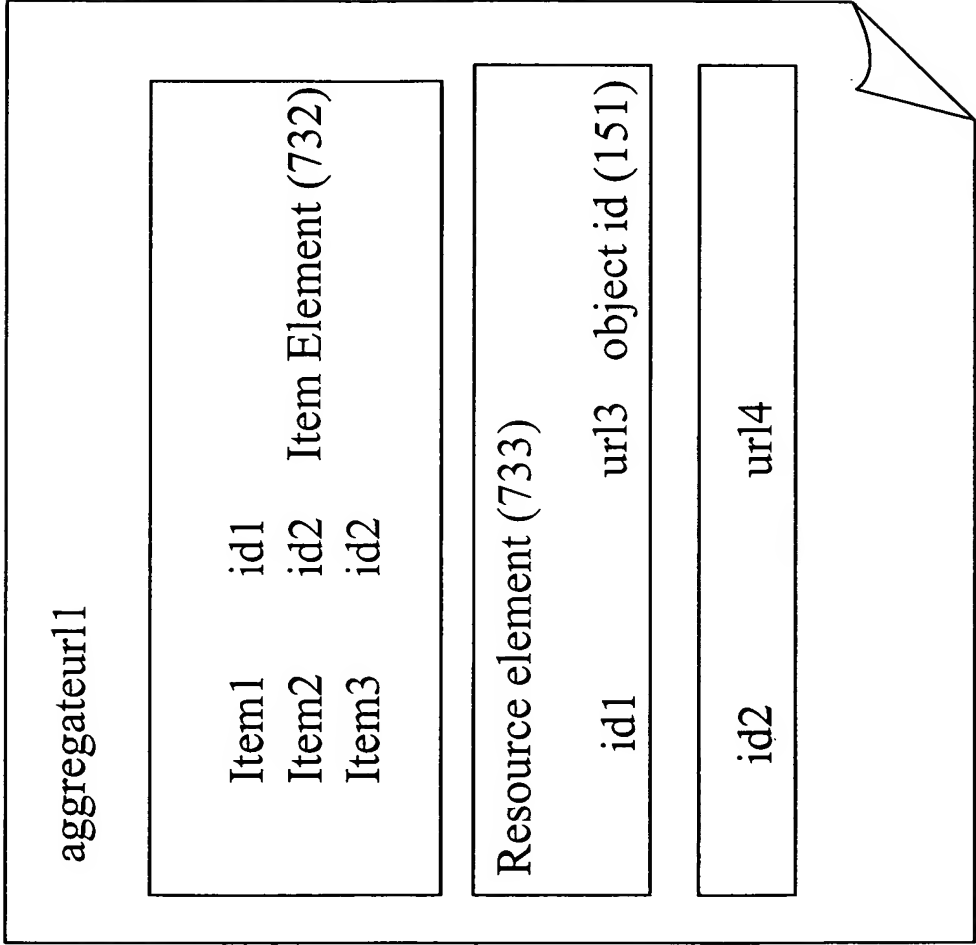


Fig. 21

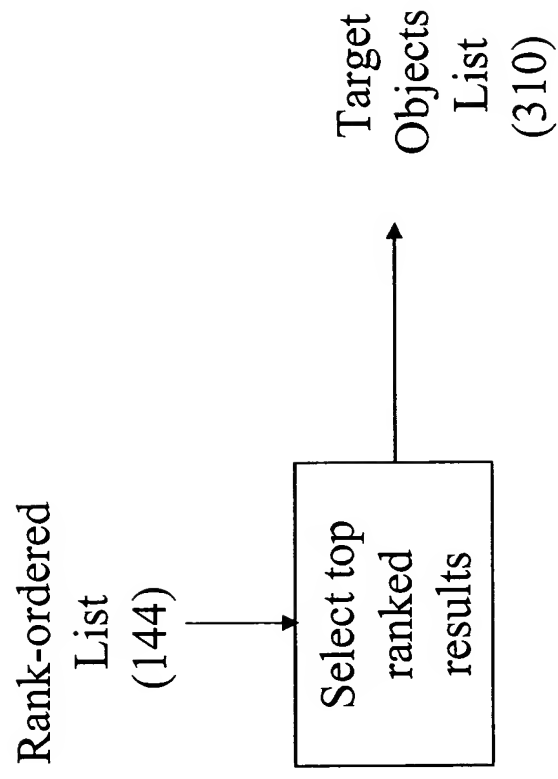


Fig. 22

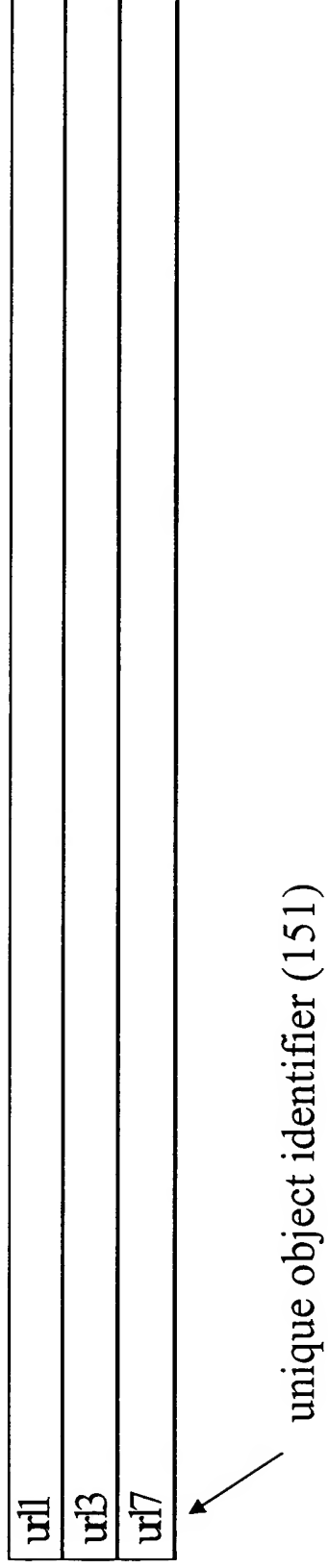


Fig. 23

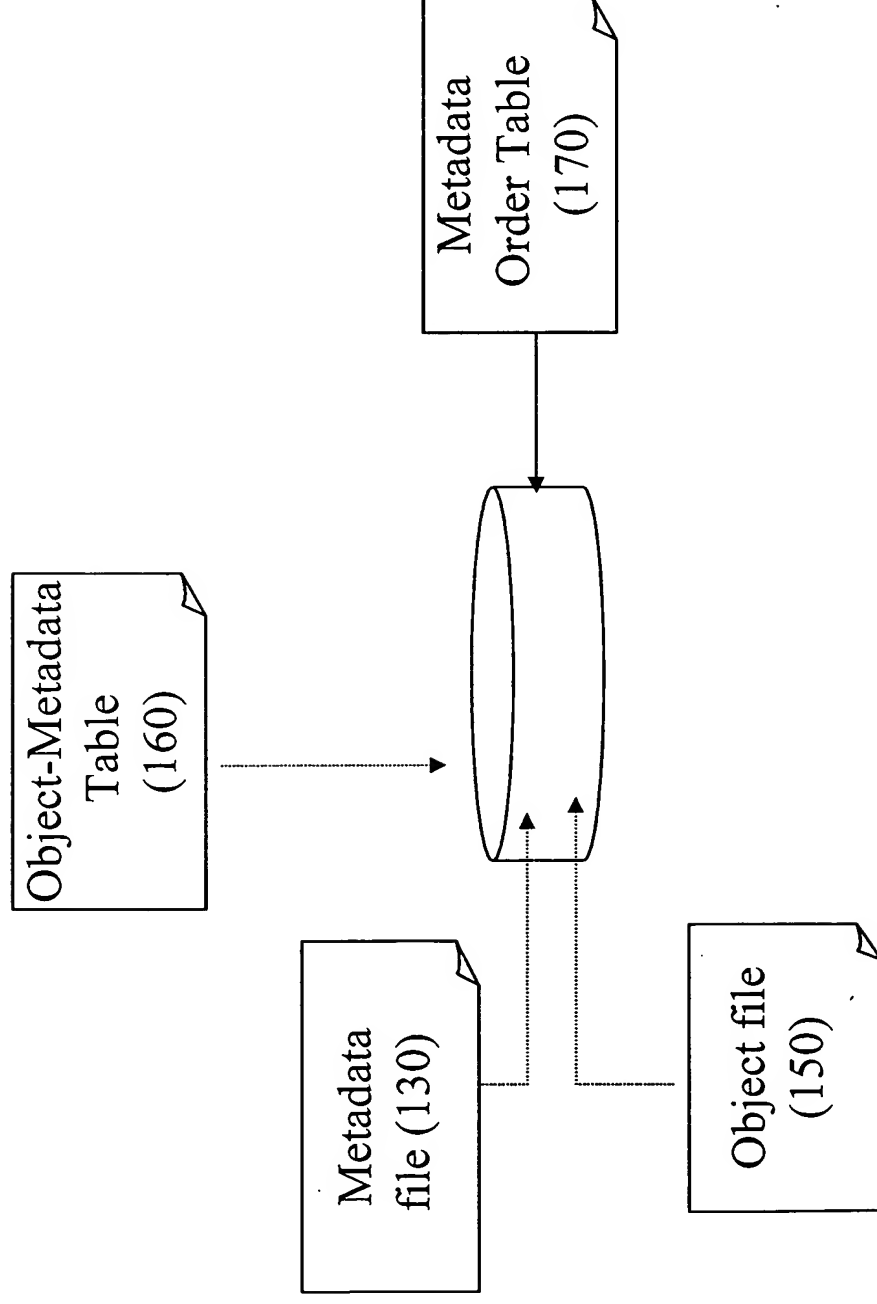


Fig. 24

705

Category Order (710)	Role Order (720)	Difficulty Order (740)	Resource Type Order (750)
A	Introduction	Very Easy	Slides
C	Motivation	Easy	Text
B	Concepts	Medium	
E	Procedures	Difficult	
D	Conclusions	Very Difficult	

111 keywords	List of String: {"j2ee", "websphere"}
112 duration	Tuple of 2 Integers: [ min, max ]
113 search scope	String: one of "overview" or "indepth"
114 desired media types & resource types	List of String: {"text", "slide"}
116 desired difficulty levels	List of String: {"very easy", "easy"}

O b j e c t I d e n t i f i e r ( 1 5 1 )	S c o r e ( 1 4 3 )
ur4	50
ur16	76
ur13	83

Fig. 27

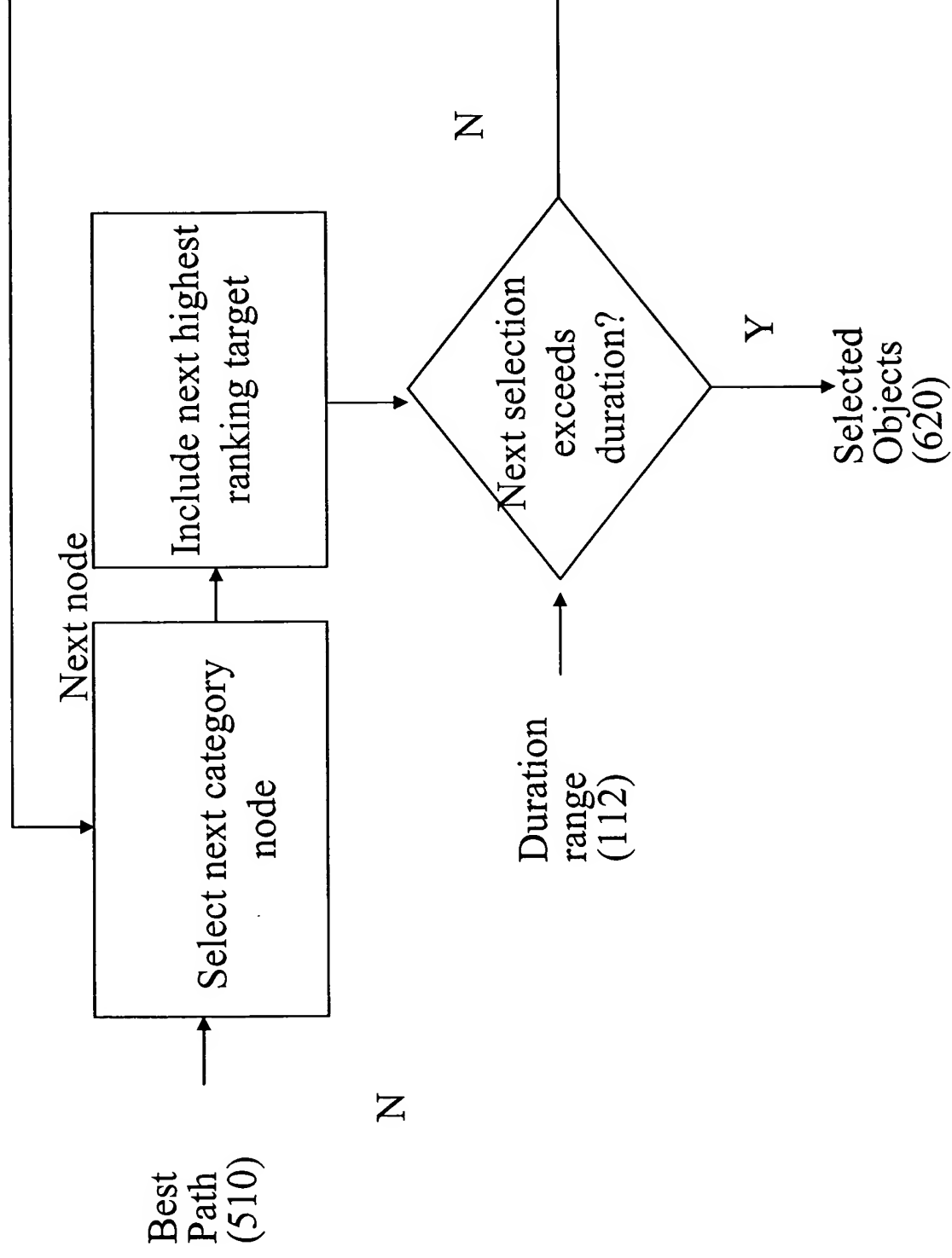


Fig. 28

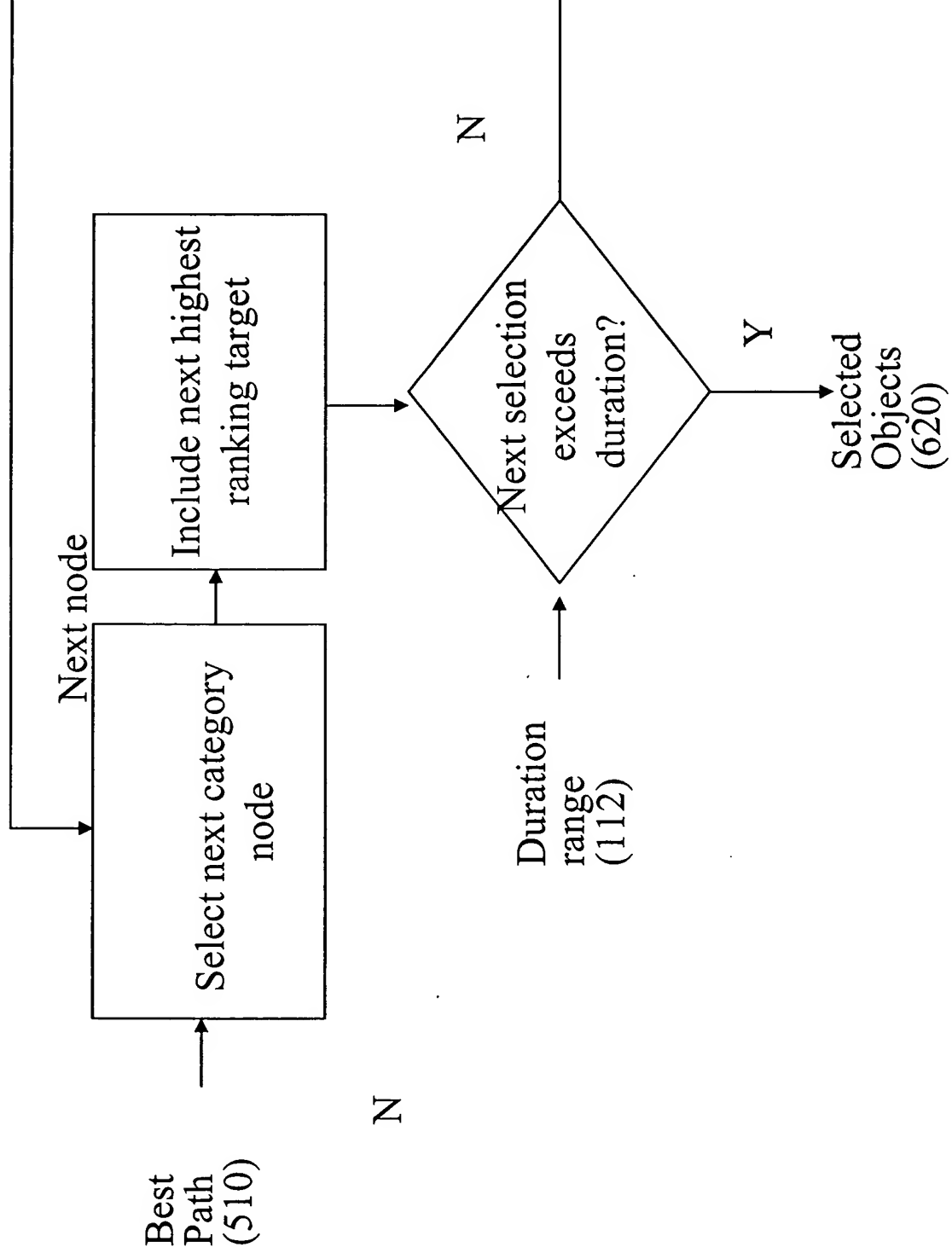


Fig. 29

